



PATENT COOPERATION TREATY

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REC'D 18 JAN 2005

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 43106PCT1		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/05522		International filing date (day/month/year) 17.12.2003	Priority date (day/month/year) 10.01.2003
International Patent Classification (IPC) or both national classification and IPC D06F71/29			
Applicant DOCKER, George			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 7 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input checked="" type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 06.08.2004		Date of completion of this report 17.01.2005	
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB 03/05522

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

3-11 as originally filed
1, 2, 2a received on 07.12.2004 with letter of 29.11.2004

Claims, Numbers

1-23 received on 07.12.2004 with letter of 29.11.2004

Drawings, Sheets

1/13-13/13 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b));
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

see separate sheet

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,2,5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-23
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/05522

Reference is made to the following documents:

- D1: Patent Abstracts of Japan, vol. 181, no. 98 (C-1187), -& JP 06 000300 A
- D2: EP 0 328 727 A
- D3: US 2002 / 0095827 A
- D4: GB 926 388 A

I. BASIS OF THE REPORT

1. The amendment to independent claim 1 filed with letter dated 29.11.2004, as annexed to the International Preliminary Examination Report (IPER), introduces subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT.

The subject-matter of this amended claim 1 is defined, inter alia, by that the means which allows the pressure plate to move relative to the heatable pad "are operable to cause said plate to slide between said first and second position" (see amended claim 1, lines 10-12). Hence, amended claim 1 comprises any assembly wherein the pressure plate may slide between said first and second position.

However, the application as filed refers specifically and only to "a slide member" and "guide means which allow said one end of the **pressure plate to slide** along opposite side edges of the heatable pad so that the pressure plate can be moved into said second ironing position" (original page 1, lines 29-32, claim 3) **in combination** with "a body housing the heatable pad and the pressure plate, one end of said pressure plate being pivotally attached to the body whereby **said plate can pivot** about said one end towards and away from the heatable pad" (original page 1, lines 26-28, claim 2); this is also reflected by the fact that original claim 3 refers directly only to original claim 2 and that the description of the preferred embodiment on page 3, lines 19 - page 11, line 10 discloses only the combination of the sliding movement with the pivotal movement.

Therefore, amended claim 1 relates to a generalisation of the original disclosure beyond the content of the application as filed, contrary to Article 34(2)(b) PCT. Consequently, pursuant to Rule 70.2(c) PCT, the report has been established as if this amendment had not been made, i.e. as if claim 1 had not been amended.

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EXAMINATION REPORT - SEPARATE SHEET**

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Therefore, claim 1 as originally filed forms part of the basis of this report.

Claim 1 as originally filed reads as follows:

"1. A combined trouser press and ironing board assembly comprising a heatable pad against which a surface of a pressure plate is clampable in a first pressing position to sandwich a garment to be pressed therebetween, the pressure plate being mounted by means that allow said plate to be moved relative to the heatable pad into a second ironing position in which the pressure plate extends laterally outwardly relative to the heatable pad such that the surface of the pressure plate facing the heatable pad in said first position now forms the surface on which a garment can be placed for ironing."

2. Further objections with regard to the amendments annexed to this report:

Consequently, also the amended definition of the invention on amended page 1, lines 30-32, extends beyond the content of the application as filed, contrary to Art. 34(2)(b) PCT.

It is noted that page 3, lines 1-5, 11-17, of the description reiterates only the particulars present on amended page 2, lines 23-29 and on added page 2a, lines 8-12 of the description.

V. NOVELTY (Art 33(2) PCT), INVENTIVE STEP (Art. 33(3) PCT)

1. The subject-matter of independent claim 1 as original filed (see above) and of ~~amended~~ dependent claims 2, 5 is not new in the sense of Art. 33(2) PCT.

Document D1 discloses all the features of independent claim 1, in particular (see D1, abstract, figures 1-4):

- A combined trouser press and ironing board assembly comprising a heatable pad (12) against which a surface of a pressure plate (14) is clampable in a first pressing position to sandwich a garment to be pressed there between, the pressure plate (14) being mounted by means that allow said plate (14) to be moved relative to the heatable pad (12) into a second ironing position in which the pressure plate (14) extends laterally outwardly relative to the heatable pad (12) such that the surface of the pressure plate (14) facing the heatable pad (12) in said first position now forms the surface on which a

garment can be placed for ironing.

Consequently, the subject-matter of claim 1 lacks novelty (Art. 33(2) PCT).

Further, D1 (see D1, abstract, figures 1-4) discloses all the features of dependent claims 2, 5, in particular in that the assembly of D1 comprises a pressure plate (14) pivotably connected to the body of the assembly with a leg (19) supporting the pressure plate in said second position. Hence, the subject-matter of these claims lacks also novelty (Art. 33(2) PCT).

Further, also document D2 (see D2, column 2, line 53 - column 3, line 9, column 6, lines 11-43, figure 2) discloses all features of claim 1. In particular, the assembly of D2 shows a heatable pad (44) and a pressure plate (12) wherein on that pressure plate (12) garments can be ironed. Hence, the subject-matter of claim 1 lacks also novelty (Art. 33(2) PCT) with respect to D2.

2. Furthermore, the subject-matter of dependent claims 12-20 does not involve an inventive step in the sense of Art. 33(3) PCT.

The features of dependent claims 12-20 have already been employed for the same purpose in the ironing board of D3 (see D3, paragraphs [0013] - [0015], figures 1-3). It would therefore be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features of an ironing board with corresponding effect to the combined ironing board and trouser press according to document D1 (see D1, abstract, figures 1-4), thus arriving at the same solution according to claims 12-20. Consequently, the subject-matter of these claims lacks an inventive step (Art. 33(3) PCT).

Further, in dependent claims 21-23 a slight constructional addition to the assembly of D1 or D2 is defined which comes within the scope of the customary practice followed by persons skilled in the art (see e.g. D4, page 2, line 56 - page 3, line 48, figures 1-30), especially as the advantages thus achieved can readily be foreseen and are known to the skilled person. Consequently, the subject-matter of these claims also lacks an inventive step (Art. 33(3) PCT).

3. A combined trouser press and ironing board assembly with the mechanism to move the pressure plate from the first position into the second position as defined in dependent claims 3-4, 6-11 is not disclosed or rendered obvious by the available prior art.

Trouser Press/Ironing Board

This invention relates to an apparatus or assembly that can be used as a trouser press but is capable of conversion for use as an ironing board.

5 Trouser presses in which a pair of trousers can be sandwiched and clamped between a heated pad and a pressure plate are known. Ironing boards on which garments can be ironed are also known. However, this requires two separate pieces of equipment so there is a need for an apparatus that combines both of these functions
10 into a single assembly.

It is also quite difficult to correctly position a pair of trousers in a conventional trouser press so that the creases are straight and in the correct place. It is therefore desirable to have a pressing apparatus that enables a pair of trousers or other
15 garment to be positioned more easily prior to being pressed.

Various ironing board and trouser press assemblies are known which seek to combine both ironing and pressing operations into a single unit. For example, Patent Abstracts of Japan, vol. 181, no. 98 (C-1187), and JP 06 000300 disclose a
20 combined trouser press and ironing board assembly comprising a heatable pad against which a surface of a pressure plate is clampable in a first position to sandwich a garment to be pressed therebetween, the pressure plate being mounted by means that allow said plate to be moved relative to the heatable pad into a second ironing position in which the pressure plate extends laterally outwardly
25 relative to the heatable pad and the surface thereof which was facing the heatable pad in said first position now provides the surface on which a garment can be placed for ironing. EP 0 328 727 A, US 2002/0095827, GB 926 388 A and US 5 290 998 A also disclose combined ironing board and trouser press assemblies.

30 The present invention is characterised in that the means which allow the pressure plate to move relative to the heatable pad are operable to cause said plate to slide between said first and second positions

Preferably, the assembly includes a body housing the heatable pad and the pressure plate, one end of said pressure plate being pivotally attached to the body whereby said plate can pivot about said one end towards and away from the heatable pad. In a preferred embodiment, the assembly includes a slide member at said end of the pressure plate and guide means adjacent to the heatable pad, the slide member and the guide means co-operating such that the slide member slides along the guide means when the pressure plate is moved into its second ironing position. Conveniently, the guide means comprise a slot or channel along each side edge of the heatable pad in which the slide member is located.

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Preferably, a support leg extends between the pressure plate and the body to support the pressure plate in said second ironing position. Conveniently, one end of said leg is pivotally attached to the body adjacent the base thereof, the opposite end of said leg being mounted on the pressure plate so as to be longitudinally slidable therealong.

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A secondary stay is preferably pivotally attached at one end to the support leg intermediate the opposite ends thereof, the other end having a foot thereon, the secondary stay being received in a recess in the support leg. In a preferred embodiment, a secondary linking member extends between the housing and the stay.

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Preferably, a mechanism is included to assist a user move the pressure plate into the second position, wherein the mechanism includes a spring in the support leg having one end attached to the leg and the other end attached to the pressure plate via a flexible cord, the spring being held in tension by the cord when the pressure plate is in its first position such that, as the pressure plate is moved into its second position, the tension in the spring gradually reduces and helps the user draw the pressure plate into said second position.

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The pressure plate is preferably hollow with apertures in the surface on which garments are to be ironed, the hollow pressure plate communicating with extractor means housed in the body operable to draw steam generated during ironing away

- 2a -

from the pressure plate. Conveniently, the extractor means comprises a fan connected by ducting to the hollow interior of the pressure plate when said plate is in its second ironing position.

- 5 A preferred embodiment includes a base plate on which to place the sole plate of the iron in a stowed position, the base plate having holes therein through which steam generated by the iron is drawn into the duct when the fan is in operation. Conveniently a valve member is included in the duct movable between a first position in which steam is drawn only from the pressure plate into the duct by the fan and a second position in which the steam is drawn only from the iron through the base plate into the duct by the fan, the valve member moving into said second position when the iron is placed on the base plate.

- 15 The extractor means advantageously includes a condenser unit to remove liquid from steam drawn out of the pressure plate by the extractor fan. Preferably, a water reservoir is housed within the body to collect condensate from the condenser unit.

- 20 Preferably, a pressurised steam boiler is housed within the body, said boiler being connected to a steam outlet to which a steam iron or brush can be connected. In the preferred embodiment, a duct connects the boiler with the water reservoir so that water can be fed thereto.

- 25 In one embodiment, the assembly includes a base plate on which to place the sole plate of the iron in a stowed position, the base plate having holes therein through which steam generated by the iron is drawn into the duct when the fan is in operation.

30

Claims

1. A combined trouser press and ironing board assembly comprising a heatable pad (14) against which a surface of a pressure plate (4) is clampable in a first position to sandwich a garment to be pressed therebetween, the pressure plate being mounted by means that allow said plate to be moved relative to the heatable pad into a second ironing position in which the pressure plate (4) extends laterally outwardly relative to the heatable pad (14) and the surface (4a) thereof which was facing the heatable pad (14) in said first position now provides the surface (4a) on which a garment can be placed for ironing, characterised in that the means which allow the pressure plate (4) to move relative to the heatable pad (14) are operable to cause said plate to slide between said first and second positions.

2. An assembly as claimed in claim 1 wherein the assembly includes a body (1) housing the heatable pad (14) and the pressure plate (4), one end of said pressure plate (4) being pivotally attached to the body (1) whereby said plate (4) can pivot about said one end towards and away from the heatable pad (14).

3. An assembly as claimed in claim 2 comprising guide means which allow said one end of the pressure plate (4) to slide along opposite side edges of the heatable pad (14) so that the pressure plate (4) can be moved into said second ironing position.

4. An assembly as claimed in claim 3 wherein said guide means comprises a slot (15) along each side edge of the heatable pad (14).

5. An assembly as claimed in any of claims 2-4 wherein a support leg (6) extends between the pressure plate (4) and the body (1) to support the pressure plate (4) in said second ironing position.

6. An assembly as claimed in claim 5 wherein one end of said leg (6) is pivotally attached to the body (1) adjacent the base thereof, the opposite end of said leg (6)

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being slidably mounted in the underside of the pressure plate (4) to be longitudinally slidable therealong.

7. An assembly as claimed in claim 5 or claim 6 wherein a secondary stay (5) is pivotally attached at one end to the support leg (6) intermediate the opposite ends thereof, the other end having a foot (5a) thereon.

8. An assembly as claimed in claim 7 wherein said secondary stay (5) is received in a recess in the support leg (6).

9. An assembly as claimed in claim 7 or 8, wherein a secondary linking member (40) extends between the housing and the stay (5).

10. An assembly according to any of claims 6 to 9, including a mechanism to assist a user move the pressure plate (4) into the second position.

11. An assembly according to claim 10, wherein the mechanism includes a spring (44) in the support leg (6) having one end attached to the leg (45) and the other end attached to the pressure plate (4) via a flexible cord (46), the spring (44) being held in tension by the cord (46) when the pressure plate (4) is in its first position such that, as the pressure plate (4) is moved into its second position, the tension in the spring (44) gradually reduces and helps the user draw the pressure plate (4) into said second position.

12. An assembly as claimed in any preceding claim wherein the pressure plate (4) is hollow and in the surface on which garments are to be ironed (4a) has a plurality of apertures (4c) therein.

13. An assembly as claimed in claim 12, wherein the hollow pressure plate (4) communicates with extractor means housed in the body operable to draw steam generated during ironing from the hollow interior of the pressure plate (4).

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14. An assembly as claimed in claim 13, wherein the extractor means comprises a fan (23) connected by ducting (22a, 22b) to the hollow interior of the pressure plate (4) when said plate is in its secondary ironing position.

15. An assembly as claimed in claim 14, including a base plate (34) on which to place the sole plate (35) of the iron (3) in a stowed position, the base plate (34) having holes (36) therein through which steam generated by the iron (3) is drawn into the duct (22a) when the fan is in operation.

16. An assembly as claimed in claim 15, including a valve member (38) in the duct (22a) movable between a first position in which steam is drawn only from the pressure plate (4) into the duct (22a) by the fan (23) and a second position in which the steam is drawn only from the iron (3) through the base plate (34) into the duct (22a) by the fan (23), the valve member (38) moving into said second position when the iron (3) is placed on the base plate (34).

17. An assembly as claimed in claim 15 or 16, wherein the extractor means include a condenser unit (22) to remove liquid from steam drawn into the duct (22a) by the extractor fan (23).

18. An assembly as claimed in claim 17, wherein a water reservoir (20) is housed within the body (1) to collect condensate from the condenser unit (22).

19. An assembly as claimed in any of claims 2-18, wherein a pressurised steam boiler (21) is housed within the body (1), said boiler (21) being connected to a steam outlet (21b) to which the steam iron or brush (3) can be connected.

20. An assembly as claimed in claim 19, wherein a duct (21a) connects the water reservoir (20) with the boiler (21).

21. An assembly according to any preceding claim, wherein the pressure plate (4) includes a pair of laterally extending retractable arms (30) having clips (31) at the ends thereof for gripping garments placed on the pressure plate (4).

22. An assembly as claimed in any of claims 2-21, wherein the body (1) has a pair of wheels (7) rotatably mounted thereon.
- 5 23. An assembly as claimed in any of claims 2-22, wherein a retractable power cable (12) is housed in the body (1).